

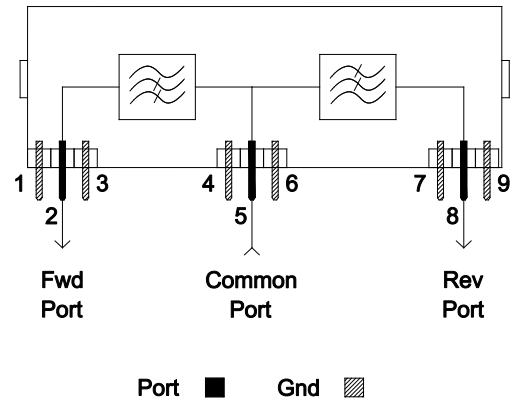
Features

- Plug in Design
- Low Insertion Loss
- Excellent Cross over Isolation
- Excellent Return loss
- RoHs Compliant
- Lead-free

Description

The MAFL-011062 is a high performance vertical plug-in diplex filter designed specifically for the CATV infrastructure market.

Functional Schematic



Ordering Information

Part Number	Package
MAFL-011062	480

Pin Configuration

Pin No.	Function
1,3,4,6,7,9	Ground
2	Forward Path Port
5	Common Port
8	Reverse Path Port

Vertical Plug-in Diplex Filter 5-204/258-1218MHz

Rev. V1

Target Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$

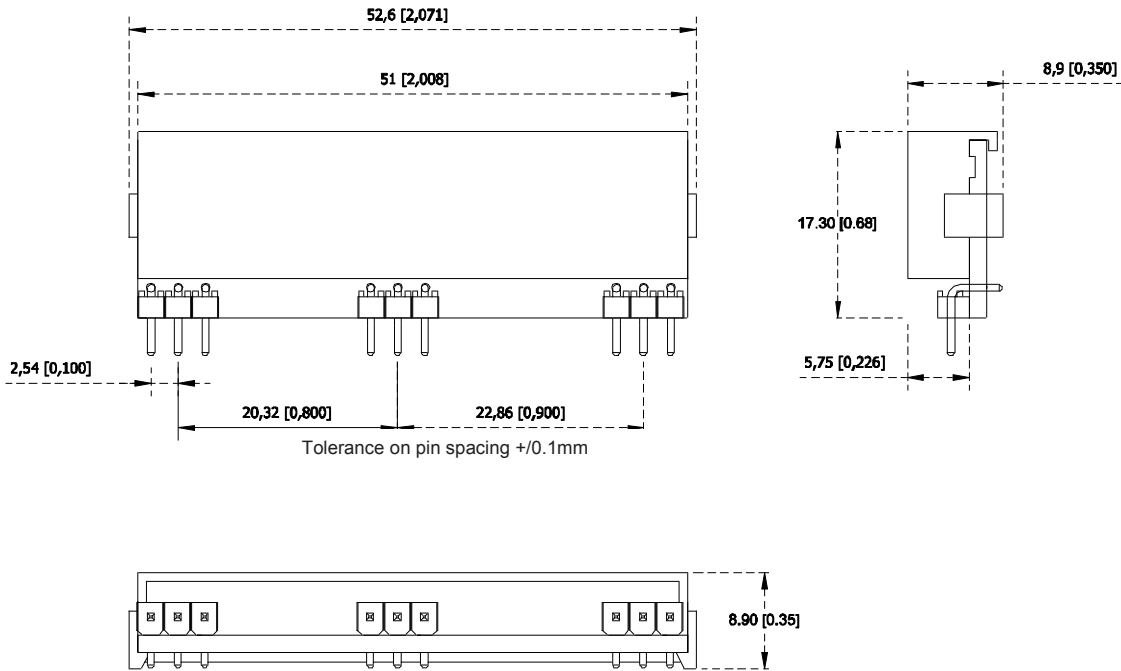
Parameter	Units	Min	Typ	Max
Insertion loss				
Reverse Path 5 - 204 MHz	dB	—	1.0	1.2
Forward Path 258 - 1218 MHz	dB	—	1.0	1.2
Isolation				
5 - 204 MHz	dB	48	51	—
205 - 257 MHz	dB	37	39	—
258 - 1218 MHz	dB	48	51	—
Return loss				
Common Port				
5 - 204 MHz	dB	20	22	—
258 - 1218 MHz	dB	20	22	—
Group Delay				
Reverse Path				
201.0 - 202.5 MHz	nSec	—	10.0	—
202.5 - 204.0 MHz	nSec	—	16.0	—
Forward Path				
259.2625 - 262.84 MHz	nSec	—	16.0	—
265.2625 - 268.84 MHz	nSec	—	10.0	—

Recommended Maximum Ratings^{1,2}

Parameter	Absolute maximum
RF power	250mW
DC current	30mA
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +85°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

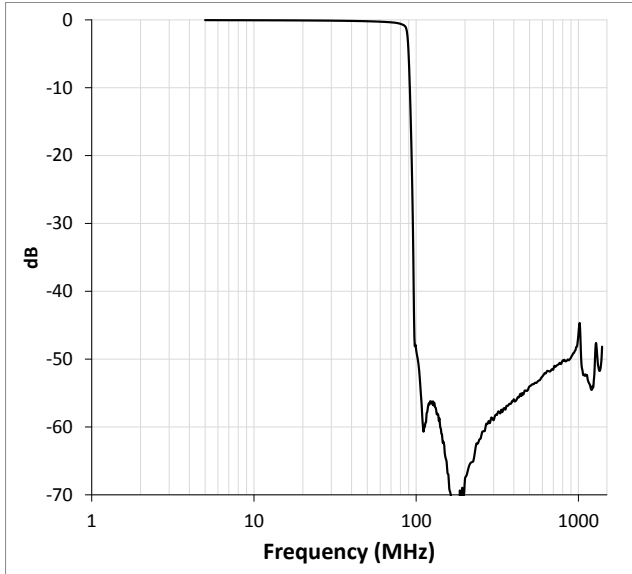
Outline Drawing



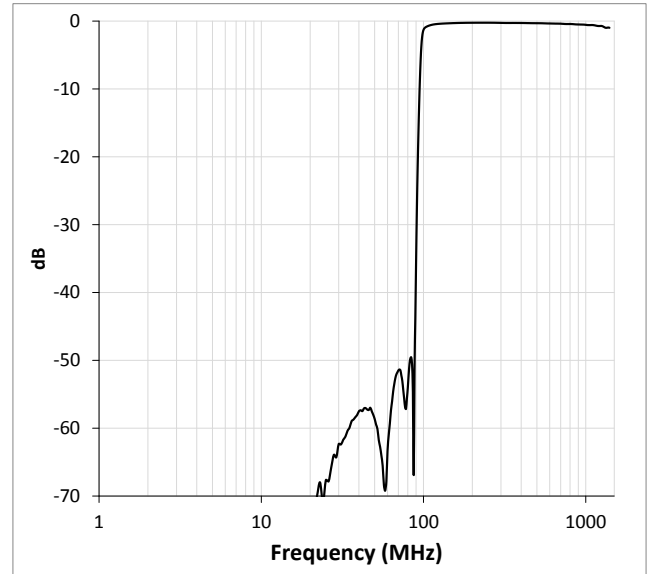
Dimensions in mm [inches] (Tolerance +/-0.3mm unless stated otherwise)

Typical Performance Curves:

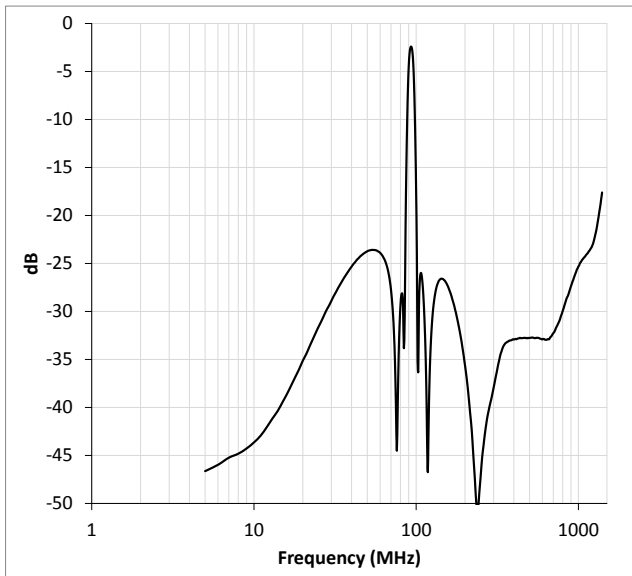
Low Pass Filter



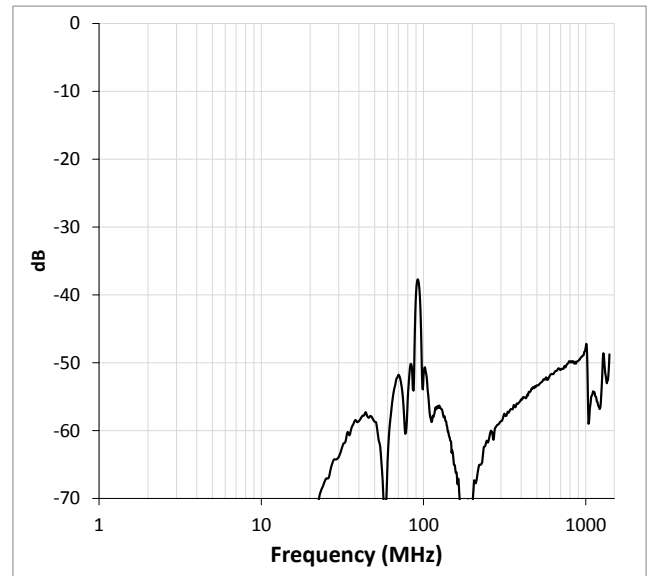
High Pass Filter



Common Port Return Loss

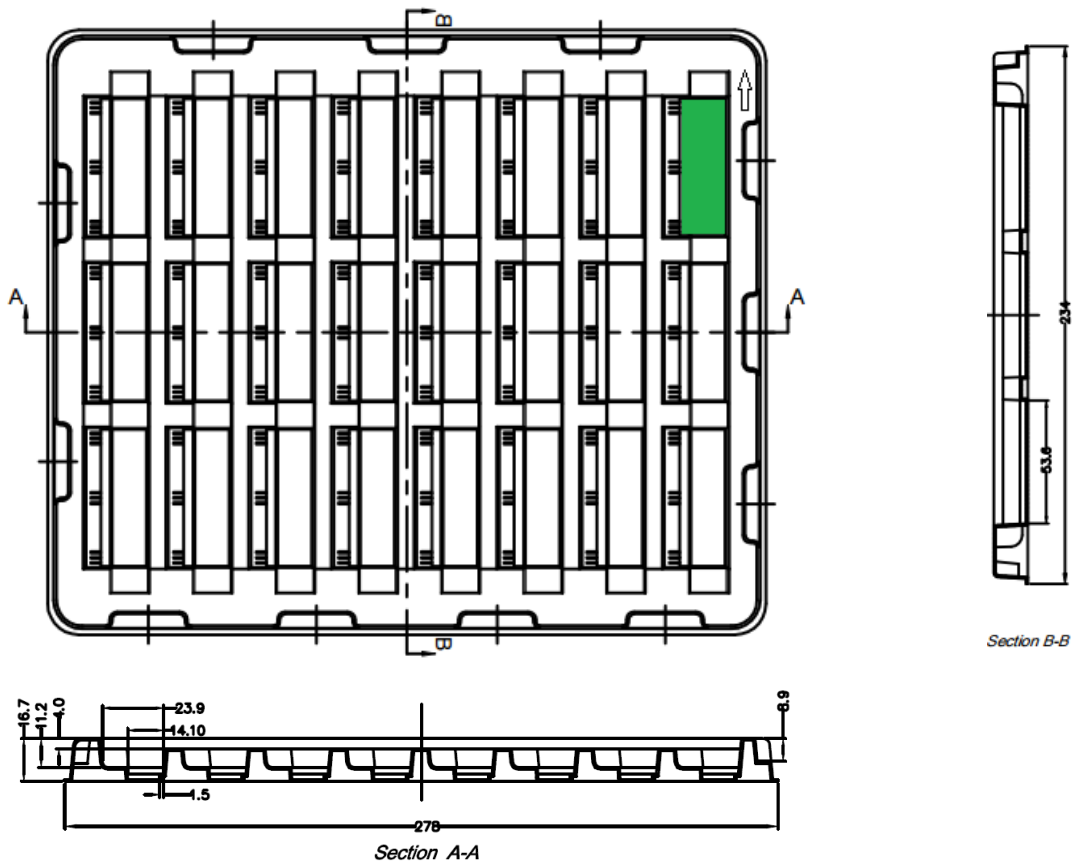


Isolation



Tray Information

Parameter	Units	Value
Min Order Qty	-	480
Tray Length	mm	278
Tray Width	mm	234
Tray Height	mm	16.7
Orientation	-	See below
Consecutive trays will be stacked alternately at 180°		



Dimensions are in millimetres.

Tolerance: $.x \pm 0.1$ mm, except where specified.

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